

Application No. 10/766,582  
Response to Office Action

Customer No. 01933

**Listing of Claims:**

Claims 1-9 (Canceled).

10. (Currently Amended) A microchemical system ~~as claimed~~  
~~in any one of claims 2 to 5, comprising:~~

an exciting light source that outputs exciting light;

a detecting light source that outputs detecting light;

5 an optical unit comprising an optical waveguide that guides  
the exciting light and the detecting light together, and an  
irradiation lens that irradiates the exciting light and the  
detecting light guided by said optical waveguide path onto a  
sample;

10 detecting means for detecting the detecting light passing  
through a thermal lens generated by the sample on which the  
exciting light has been irradiated; and

analysis means for analyzing the sample based on the  
detected detecting light;

15 wherein [[:]] said optical unit further comprises a channel  
disposed downstream of said irradiation lens in a direction of  
travel of the exciting light and the detecting light and through  
which a liquid containing the sample flows, and said detecting  
means is disposed downstream of the channel in the direction of  
20 travel of the exciting light and the detecting light.

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11. (Currently Amended) A microchemical system ~~as claimed~~  
~~in any one of claims 2 to 5, further comprising:~~

an exciting light source that outputs exciting light;

a detecting light source that outputs detecting light;

5 an optical unit comprising an optical waveguide that guides  
the exciting light and the detecting light together, and an  
irradiation lens that irradiates the exciting light and the  
detecting light guided by said optical waveguide path onto a  
sample;

10 detecting means for detecting the detecting light passing  
through a thermal lens generated by the sample on which the  
exciting light has been irradiated;

analysis means for analyzing the sample based on the  
detected detecting light; and

15 a channel-formed plate-shaped element disposed between the  
optical unit and the detecting means and having a channel through  
which a liquid containing the sample flows.

12. (Original) A microchemical system as claimed in  
claim 11, further comprising a parallel moving mechanism that  
moves said optical unit and said detecting means in parallel with  
a surface of said channel-formed plate-shaped element while  
5 maintaining relative positions of said optical unit and said  
detecting means.

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13. (New) A microchemical system as claimed in claim 10, wherein said irradiation lens is fixed to an end of the optical wave guide path through which the exciting light and the detecting light are output.

14. (New) A microchemical system as claimed in claim 10, wherein the detecting light has a different frequency than the exciting light, and said irradiation lens has a chromatic aberration.

15. (New) A microchemical system as claimed in claim 10, wherein the detecting light has a different frequency than the exciting light, and said irradiation lens has a chromatic aberration.

16. (New) A microchemical system as claimed in claim 11, wherein said irradiation lens is fixed to an end of the optical wave guide path through which the exciting light and the detecting light are output.

17. (New) A microchemical system as claimed in claim 11, wherein the detecting light has a different frequency than the exciting light, and said irradiation lens has a chromatic aberration.

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18. (New) A microchemical system as claimed in claim 11, wherein the detecting light has a different frequency than the exciting light, and said irradiation lens has a chromatic aberration.